

⊕EPA

Indoor Air Quality Tools for Schools

Indoor Air Quality (IAQ)

Questions and Answers

CDC School Health Policies and Practices Study: Key Findings on School Indoor Environments Webinar

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SHPPS Design and Results

Q. Did you include Head Start Programs in the School Health Policies and Practices Study?

SHPPS 2012, the topic for the February 27 webinar, examined school health policies and practices at the state and district levels, not the school level. School-level data collection for SHPPS began in February 2014 and includes schools that contain any grades from K-12. Thus, Head Start programs would be included only to the extent Head Start programs were housed in a school facility also serving students in other grades.

Q. What efforts were made to include Tribal Nations in the surveys?

At the state level, SHPPS 2012 included all 50 states and the District of Columbia. Tribal governments were not sampled separately. At the district level, a sample was drawn to be nationally representative of public school districts. Tribal school districts identified as public school districts would have been on the sampling frame.

Q. When will the next SHPPS be administered?

School-level data collection for SHPPS began in February 2014. If funding is available, SHPPS will be administered at the district level again in 2016 and at the school level in 2018.

Q. Is the questionnaire for Physical School Environment available online to review for research purposes?

Yes, all SHPPS 2012 questionnaires, data, and documentation are available for public use on the CDC/SHPPS website: www.cdc.gov/shpps. Data files and documentation from previous SHPPS cycles are also available on the SHPPS website. The February 27 webinar presented data from the Healthy and Safe School Environment Questionnaires.

Q. Can you tell us a bit about the composition of your data pool (e.g., size of school districts)?

A full description of the SHPPS methods can be found here: http://www.cdc.gov/healthyyouth/shpps/2012/pdf/shpps-results_2012.pdf#page=19
For state-level data, education agencies for all 50 states and the District of Columbia participated in SHPPS 2012. At the district level, procedures were used to ensure the sample was nationally representative: urban and non-urban, high-poverty and low-poverty, and smaller and larger districts were sampled.

Q. How many of the state-coordinated School Health Teams have dissolved with the elimination of the CDC CSH grants?

The coordinated school health approach is used in many states and local school districts. It is often used as a framework for school improvement efforts. CDC's Division of Adolescent and School Health and Division of Population Health, School Health Branch require funded partners to design their programs using this approach.

SHPPS 2012 found that 68.8% of states had one or more than one group of people (e.g., a committee, council, or team) formally charged with coordinating state-level school health-related activities. SHPPS does not measure the extent to which these groups are influenced by funding from the Centers for Disease Control and Prevention or any other funding source.

Q. Did you assess the data broken down by schools that reported an IAQ program vs. not?

School-level data collection for SHPPS began in February 2014. District level data could be stratified by whether or not the district had an IAQ program, but this analysis has not been conducted to date using SHPPS 2012 data.

A paper published in the *Journal of School Health* used SHPPS 2006 data to examine whether schools with a formal IAQ program were more likely than schools without a program to have policies and use strategies to promote high quality indoor air (see Everett Jones S, Smith AM, Wheeler LS, McManus T. School policies and practices that improve indoor air quality. *Journal of School Health* 2010; 80(6):280-286.)

Q. For the data related to school health committees, is there any way to know if the "maintenance staff" participants were always managers as opposed to having workers or their representatives participating? For example, if it was determined by SHPPS that 50% of schools had IAQ management programs, the vast majority based on the IAQ Tools for Schools and that 70% - 80% of school districts inspected/assessed looked at HVAC, mold, etc., what work has been done to determine either the accuracy and/or quality of these claims and efforts?

The SHPPS 2012 questions about who was represented on the school health council, committee, or team did not ask respondents to identify whether the maintenance staff representatives held management positions.

SHPPS 2012 is limited in its ability to provide data on the quality of the policies and practices measured. Respondents were asked only to report whether certain policies existed. It is possible that a policy could exist but not reflect best practices in its implementation. In addition, as with any study that relies on self-reporting, it is possible that the data reflect some amount of over-reporting or under-reporting, as well as actual lack of knowledge on the part of the respondents.

Q. Which states most closely follow IAQ-related policy?

SHPPS data cannot be used to answer this question.

Q. Because the school- and classroom-level study is just getting underway, how will accurate data and information about what is actually occurring in schools and/or classrooms be collected? Who will provide feedback and contact? Teachers? Their unions?

During school recruitment for the study, an information packet was mailed to the principal of the selected schools. The school packets and follow-up telephone calls sought each school's agreement to participate in the study, identification of the most knowledgeable respondent for each of the school-level questionnaires and modules, and identification of questionnaires and modules not applicable to the school. SHPPS is limited in its ability to provide data on the quality of the policies and practices measured. Respondents were asked only to report whether certain policies existed or practices took place. It is possible that a policy or practice could exist but not reflect best practices in its implementation. In addition, as with any study that relies on self-reporting, it is possible that the data reflect some amount of over-reporting or under-reporting, as well as actual lack of knowledge on the part of the respondents.

Q. What is the CDC policy on use of SPF insulation in schools?

CDC refers questions about spray polyurethane foam (SPF) and associated health effects to the U.S. Environmental Protection Agency. (http://www.epa.gov/dfe/pubs/ projects/spf/spray_polyurethane_foam.html).

Q. Will SHPPS be asking the schools anything about hand washing in future surveys? This would affect health in many ways (e.g., exposure to lead, PCBs, spread of infectious disease). Often, this basic public health measure is skipped due to lack of instructional time.

At the school level, SHPPS does address hand washing, including, for example, a question about hand washing facilities or hand sanitizers available for students to use.

Q. Do you know how many schools have started to implement the ISSA Clean Standard: K-12 Schools? (This establishes a framework to help schools objectively assess the effectiveness of the cleaning process at their facilities, and thereby contribute to the quality of indoor environment.)

SHPPS did not address this topic.

Q. For the IPM data on how districts required schools to inspect indoor environments and outdoor grounds at various time intervals: Do you know if this was for a 12-month calendar or traditional school year only (September to end of May or June), given there are year-round schools versus traditional calendars (particularly at primary grade levels)?

The question was worded as follows: "how often are schools in your district required to conduct a campus-wide inspection for pests such as ants, mice or rats? For the purpose of this question, campus-wide means inside the building and on the school grounds." Response options were: weekly, monthly, quarterly, every 6 months, once per year, only as needed, and other time frame. The question did not specify calendar year or school year. EPA notes that the need to inspect for pests is important even when school is out of session.

IAQ Tools for Schools Resources

Q. Can EPA's IAQ Tools for Schools Action Kit be used in a college environment effectively?

Yes; it can be and has been used on college campuses. We find many of the same conditions in college campuses as other large school facilities where there are many students and many of the same environmental conditions.

Q. Do you know how many schools have a policy to inform parents when there is an IAQ issue at a school?

EPA does not have this information and the SHPPS data cannot be used to answer this question.

Q. Has the IAQ Tools for Schools Action Kit been updated or is there only one edition?

The Action Kit was first published in 1994 and has been updated periodically, ensuring all resources are current and up-to-date. Twenty years later the *IAQ Tools for Schools* Action Kit still contains best practices, sample policies and sample IAQ management plans to help schools and school districts take immediate action to implement effective IAQ management programs. All of the current resources within the Kit can be found online.

Q. How did you articulate and develop the Six Key Drivers?

The <u>Framework for Effective School IAQ Management</u>, along with the Technical Solutions, are guidelines that detail the organizational approaches and practices that are fundamental to school IAQ program success. The Framework and six Technical Solutions were gleaned from a combination of the feedback from more than 1,000 schools and districts across the country that put the *IAQ TfS* Action Kit into action and more than 20 years of research on IAQ programs in schools.

Q. Where can you obtain an action plan for an IAQ management program?

You can develop an action plan tailored to your school district utilizing EPA's *IAQ Tools* for Schools guidance documents and resources to help your district develop and sustain an effective and comprehensive IAQ management programs. The *IAQ Tools for Schools* guidance has been implemented successfully in tens of thousands of schools nationwide. Get started with the *IAQ Tools for Schools* guidance here: http://www.epa.gov/iaq/schools/excellence.html.

Q. Are there plans to provide workshops to educate school boards and personnel about EPA's IAQ Tools for Schools?

EPA conducts <u>trainings</u>, such as this <u>webinar</u>, to educate all audiences essential to creating healthy indoor environments in schools. EPA also <u>partners with organizations</u> around the country that conduct trainings and webinars and have ties to a variety of school audiences.

General IAQ

Q. Is there any compulsory policy towards IAQ and pollutants (e.g., VOC, formaldehyde) that schools have to follow?

EPA's IAQ Tools for Schools guidance is voluntary. While we provide this guidance along with training and technical assistance for schools and school districts, this is not a regulatory program. There are standards available. For example, ASHRAE standards for ventilation are available and applicable to schools. EPA will also be releasing new voluntary guidance later this year entitled Energy Savings Plus Health: IAQ Guidelines for School Building Upgrades, which will provide information on how school districts can protect and improve IAQ during building upgrades, linking energy efficiency and IAO.

Q. What is the gap between policy adopted and what happens at one building?

EPA does not require schools to use the voluntary IAQ Tools for Schools guidance, nor does it require the retention or submission of any information gathered. . EPA recommends that districts focus on the proven strategies found within the Framework for Effective School IAQ Management, specifically Key Drive #4, Plan Your Short and Long-Term Activities, and Key Driver #5, Act to Address Structural, Institutional, and Behavioral Issues, in order to close such gaps. EPA does not require schools to use the voluntary IAQ Tools for Schools guidance, nor does it require the retention or submission of any information gathered.

Q. Where can we find more information on PCBs?

EPA provides guidance on Polychlorinated Biphenyls (PCBs) here: http://www.epa.gov/epawaste/hazard/tsd/pcbs/index.htm

Q. Under normal HVAC conditions, doctors have recommended to change out air filters on HVAC units every month for asthma prone students. However, filter manufactures claim that filters are most effective to stop pollutants after 2 months of normal use with a change out after 3 months. What is your opinion?

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	Maintenance requirements and schedules for HVAC systems vary and are dependent on a number of variables. EPA generally recommends that equipment be maintained according to manufacturer recommendations.
Q. Ho	w does asbestos figure into IAQ?

Q. The biggest hurdle I face implementing an IAQ program or policy in the face of budget cuts is the lack of permissible exposure limits. What efforts are being made to develop mandatory standards regarding IAQ permissible exposure limits?

The Occupational Safety and Health Administration (OSHA) has regulatory authority over workplace health and safety issues. EPA does not have the authority to develop mandatory limits on IAQ contaminant levels in buildings. However, we have found that other factors, like reducing staff complaints and reducing absenteeism have been compelling for school districts.

Q. How many people are participating in this webinar (curious about the polling results)?

The SHPPS: Key Findings on School IAQ Management webinar had 260 participants. You can find the results from the polling questions within the webinar presentation.

Q. Who are the governmental agencies in charge of IAQ-related policy for schools?

No single federal agency has been designated as the lead for IAQ-related policy in schools. A number of agencies, including the Department of Education, Department of Energy, Centers for Disease Control, the National Institute for Occupational Safety and Health and EPA, among others, collaborate on a range of activities to improve the physical school environment. School design, construction, and operation and maintenance are primarily governed by state and local laws and policies.

Q. Why doesn't the EPA also offer direct support to and work with teacher unions and other associations consistent with the support work provided to school district management and other district managers?

EPA works with a wide range of governmental and non-governmental organizations to improve the school environment, including federal, state and local agencies, school districts, health and other professional organizations, including unions.

Q. One of the major, repeated problems and issues, commonly reported by building occupants/stakeholders, including parents, is that there seems to be an enormous disconnect between what they experience as real-world conditions and what they see "reported" by their school districts and data from agencies like the CDC and EPA—any explanations for such a gap?

Gaps in perception and experiences are common for any complex issue. This is one of the main reasons that the *IAQ Tools for Schools* guidance recommends implementation and use of organization and communication strategies found within the <u>Framework for Effective School IAQ Management</u> Key Drivers #1 and #2, which involve a broad range of stakeholders. These strategies help stakeholders to perceive conditions and concerns in a similar way and recognize their common experience in order to better identify and address the real conditions in a school.